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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,991	04/24/2000	KARI HUTTUNEN	PM268081	7245

909 7590 10/28/2003

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EXAMINER

HO, DUC CHI

ART UNIT	PAPER NUMBER
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2665

9

DATE MAILED: 10/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,991

Applicant(s)

HUTTUNEN, KARI

Examiner

Duc C Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-11 and 16 is/are rejected.
- 7) ☒ Claim(s) 3-6 and 12-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).
3. Claims 1-2, and 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Turina (US 5,784,362).

Regarding claim 1, Turina discloses temporary frame identification for ARQ in a reservation-slotted Aloha type of protocol. Figure 7 shows a communication system, which comprises a mobile station in communication with a base station via uplink/downlink connections. In the GSM communication system, "channel allocation" refers to a procedure of rendering channels available for use at a base station; thus, the capacity or load of the base station can be controlled by providing (adjusting) information when there is available channels for use.

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using the telecommunication connection for connection set up and data transfer, the telecommunication connection including a channel (a random access sub channel) for relaying channel allocation requests transmitted by the subscriber terminal to the network part (a MS initiates a packet transfer to a base station by transmitting a random access request Ra on a packet data channel (PDCH) uplink. The transmission of Ra is allowed when a random access sub-channel is determined by up link state flags (USFs) marked as "free", see column 5, lines 50-65) and controlling the telecommunication system load by adjusting the capacity of the channel used for relaying the channel a allocation request (the MS checks that the USF=f, and if it is, the MS transmit the random access request in the next time slot. If the USF=R(reserved), the MS typically would wait until the USF=f; by using the USF information for channel allocation, the base station system load is controlled, see column 5-line 50 to column 6-line 67).

Regarding claim 2, since the base station includes capability to provide one or more shared PDCHs, depending on demand, see column 9, lines 21-23, the random access sub- channel capacity relaying the information USF=f would be increased. If the base station is assumed overloaded, the random access sub-channel capacity would be decreased relaying the information USF=r).

Regarding claim 8, in Turina the controlling load method is inherently utilized in the base station and the BS controller, see figure 7.

Regarding claim 9, in the current GPRS standard (GSM Technical Specification GSM 04.60, Version 0.9.1, Sep., 26, 1996), the physical channel dedicated to packet

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data traffic in the GPRS is called a Packet Data Channel (PDCH). For a GPRS mobile-originated packet transfer, a MS initiates the packet transfer by making a random access request on the PDCH uplink over the Packet Random Access Channel (PRACH). In other words, a high PRACH capacity such as the random access sub-channel for making a random access request is taught by Turina.

Regarding claim 10, the claim has similar limitations as claim 1. Therefore, it is rejected under Turina for the same reasons set forth in the rejection of claim 1.

Regarding claim 11, since the base station includes capability to provide one or more shared PDCHs, depending on demand, see column 9, lines 21-23, the random access sub-channel capacity (PRACH) for relaying the information $USF=f$ would be increased. If the base station is assumed overloaded, the random access sub-channel capacity (PRACH) would be decreased by relaying the information $USF=r$.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 7, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turina, in view of Hjelm et al. (US 6,529,497), hereinafter referred as Hjelm.

Regarding claims 7, and 16, Turina discloses all claimed limitations, except a step measuring continually the base station system's processor load or the signaling load between the base station and the base station controller.

Hjelm discloses channel allocation and release for packet data services, in which the load function of the regional processor (RP) 54-fig. 1A for a BSC and a BS is measured, see figures 4C-4E, see column 11, lines 1-67.

It would have been obvious to one of ordinary skill in the art, at the time invention was made, to employ a mechanism in which the signaling load between the base station and the base station controller is measured as taught by Hjelm into the system of Turina such that to prevent the base station from overloading by relaying the USF information "r" to the mobile station in order to stop the mobile station from transmitting a random access request Ra.

Allowable Subject Matter

7. Claims 3-6, and 12-15 are objected to as being independent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to claim 1, -2, 7-11, and 16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (703) 305-1332. The examiner can normally be reached on Monday through Friday from 7:00 am to 3:30 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (703) 308-6602.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4750

10. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive,
Arlington. VA, Sixth Floor (Receptionist).

Patent Examiner


Duc Ho

10-6-03